

AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116 - EXPEDITED PROCEDURE  
Serial Number: 09/077,572  
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Title: NON-TOXIC MUTANTS OF PATHOGENIC GRAM-NEGATIVE BACTERIA

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similar digests of DNA from mutants NTHi B28 and B29 revealed 4.0 kb fragments. Further, the 4.0 kb fragments were digested by EcoRI which is present in the mTn3.—

A clean copy of this paragraph is attached hereto.

#### IN THE CLAIMS

Please substitute the claim set in the appendix entitled Clean Version of Pending Claims for the previously pending claim set. Specific amendments to individual claims are detailed in the following marked up set of claims.

Please add new claim 34 and amend the claims as follows.

22. (Amended) A method of making a mutant endotoxin comprising  
mutating an htrB gene encoding a wild type endotoxin in [within] a wild type  
gram-negative bacterial pathogen to provide the mutant endotoxin; wherein the mutant  
endotoxin is the same as the wild type endotoxin except for [form an htrB mutant  
pathogen, wherein the htrB gene encodes an endotoxin] lacking one or more secondary  
acyl chains of lipid A [contained in a wild type gram-negative bacterial pathogen and  
lacking 3-hydroxy unsaturated C16 fatty acid substitutions on the lipid A as compared to  
a wild-type bacterial pathogen], and wherein the mutant endotoxin has substantially  
reduced toxicity when compared to the endotoxin of the wild type gram-negative  
bacterial pathogen[, and  
purifying the mutant endotoxin from the htrB mutant pathogen].
29. (Amended) A method for producing endotoxin-specific antisera, the method comprising  
(a) immunizing an individual with a vaccine formulation comprising an htrB mutant  
of a gram-negative bacterial pathogen, endotoxin isolated from the htrB mutant of the  
gram-negative bacterial pathogen, or endotoxin purified from the htrB mutant of the  
gram-negative bacterial pathogen wherein the endotoxin is conjugated to a carrier protein;  
and  
(b) collecting antibody produced from the immunized individual;